Please amend claims 1-18, and add a new claim 19 as follows:

1.   (Currently Amended) A method for searching at least one character string image embedded in an image, comprising:

    providing the image;

    detecting a character region in the image based upon a shape thereof line widths of the character image contained in the character region;

    extracting a first visual image feature of the character region;

    providing receiving an input of a character string image of interest by a user;

    extracting a second image visual feature from the input character string image of interest;   comparing the first visual image feature with the second image visual feature to determine a level of similarity; and

    outputting the character region or the input image comprising the character region with based on the level of similarity.

2.   (Currently Amended) The method for searching at least one character string image in an image, as claimed in claim 1, wherein at the step of outputting said character region outputs the character regions in a descending order of the a level of similarity.

3.   (Currently Amended) The method for searching at least one character string image in an image, as claimed in claim 1, wherein the step of detecting said character region on the basis of its shape determines as a the character, a region where equi-luminance pixel strings are locally concentrated, in the equi-luminance, pixels having, each of which has a luminance difference[[s]] in a pre-designated range and is [[are]] consecutive as long as a pre-designated extent, are locally concentrated.

4.   (Currently Amended) The method for searching at least one character string image in an image, as claimed in claim 1, wherein the step of detecting said character region on the basis of its shape determines as a the character, a region where equi-luminance pixel strings, each of which has a length equal to or longer than extending over a pre-designated length in both vertical and horizontal directions and has [[with]] a

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luminance difference within a pre-designated range in both ~~of the~~ of the vertical and horizontal directions ~~are present at the same time within the same image range~~.

5.   (Currently Amended) The method for searching at least one character string image in an image, as claimed in claim 1, wherein ~~at the step of extracting the first visual feature of said character area and at the step of extracting the second visual feature of said character areas,~~ both the first ~~visual~~ image feature and the second ~~visual~~ image feature to be extracted are one-dimensional feature strings ~~in which~~ of the numbers of edges in the vertical direction obtained by binarization of character regions ~~and~~ when the character strings are arrayed horizontally, and

the step of determining a level of similarity determines the level of similarity by elastic matching of the one-dimensional feature strings both of which constitute the first ~~visual~~ image feature and the second ~~visual~~ image feature.

6.   (Currently Amended) The method for searching at least one character string image in an image, as claimed in claim 1, wherein ~~at the step of extracting the first visual feature of said character area and at the step of extracting the second visual feature from said character image,~~ both the first ~~visual~~ image feature and the second ~~visual~~ image feature to be extracted are one-dimensional feature strings ~~where~~ of the numbers of edges of the binarized character region in the horizontal direction ~~obtained by binarization of character regions and~~ when the character strings are arrayed vertically, and

the step of determining a level of similarity determines the level of similarity by elastic matching of the one-dimensional feature strings ~~both~~ of ~~which constitute~~ the first ~~visual~~ image feature and the second ~~visual~~ image feature.

7.   (Currently Amended) An apparatus for searching character string images in an image comprising:

a means for entering an image,

a means for detecting a character region from the frame of the entered image on the basis of its shape,

a means for extracting a first ~~visual~~ image feature of the character area,

an input means for entering a[[ny]] desired character ~~codes~~ string by a user,

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a character image generating means for drawing an image characters ~~corresponding to the input~~ character ~~codes~~ string,

a means extracting a second ~~visual~~ image feature from the generated character image,

a feature matching a means for matching the ~~visual~~ first and the second image features ~~and visual features earlier extracted from an input frame image~~ and determining a level of similarity, and

an output means for outputting ~~as the result of search the~~ a matched character region or the input image comprising the matched character region ~~matching the visual features in respect of which the level of similarity has been determined or a frame of image containing the region~~

8.   (Currently Amended) The apparatus for searching character string image in an image, as claimed in claim 7, wherein said output means outputs the character regions in the descending order of the level of similarity obtained by the feature matching means.

9.   (Currently Amended) The apparatus for searching character string image in an image, as claimed in claim 7, wherein said character region detecting means determines the character region by judging ~~has as its determining conditions the~~ a locally concentrated presence of equi-luminance pixel strings each of which is equal to or linger than ~~extending over~~ a pre-designated length and has [[with]] a luminance difference within a pre-designated range.

10.   (Currently Amended) The apparatus for searching character string image in an image, as claimed in claim 7, wherein ~~said means for extracting the first visual feature of said character area and the means for extracting the second visual feature from said character image,~~ both the first ~~visual~~ image feature and the second ~~visual~~ image feature to be extracted are one-dimensional feature strings where the numbers of edges in the vertical direction obtained by binarization of character regions [[and]] when the character strings are arrayed horizontally, and said feature matching means performs feature matching by elastic matching of the one-dimensional feature strings both of which constitute the first ~~visual~~ image feature and the second ~~visual~~ image feature.

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11. (Currently Amended) A program stored on a computer readable medium for processing of character search in an image, comprising: for causing a computer to execute procedures a module for searching a character string image,

to a module for detecting a character region from the frame of an entered image on the basis of its shape,

to a module for extracting a first visual image feature of the character area,

a module for receiving an input of a character string input by a user,

to a module for drawing as an image [[a]] of the input character string to be searched for which has been entered by a character input means,

to a module for extracting a second visual image feature from the drawn character area image,

to a module for matching the first visual image feature and the second visual image feature to determine a level of similarity, and

to a module for outputting the character region containing [[a]] the input character string in respect of which the level of similarity has been determined.

12. (Currently Amended) The program method as claimed in claim 11, whereby wherein the step of module for detecting said character region includes extracting lines with a width in a specific range and extracting a concentrated region on the extracted lines as said character region.

13. (Currently Amended) The program method as claimed in claim 12, whereby wherein the line width is decided by a number of pixels with a luminance within a specific range or of equi-luminance.

14. (Currently Amended) The program method as claimed in claim 12 13, whereby wherein the line width is taken in vertical and horizontal directions.

15. (Currently Amended) The program method as claim in claim 14, whereby wherein the concentrated region is decided by projections of the lines multiplying a pixels number in the x vertical and horizontal directions with a pixel number in the y direction.

16. (Currently Amended) The program ~~method~~ as claimed in claim 12, ~~whereby at least one of the image visual feature extracting steps includes extracting~~ wherein the module for detecting said character region extracts a character image feature string along one dimension of the character region or extracts the character image of interest by counting a number of edges with a predetermined luminance change.

17. (Currently Amended) The program ~~method~~ as claimed in claim 12, further comprising a ~~step of~~ module for removing line border blurring by correcting a border pixel luminance value into a maximum or minimum luminance value of adjacent pixels.

18. (Currently Amended) The method as claimed in claim 1, further comprising a step of removing non-character background in the image by outlining the character region with a rectangle box having a sufficient margin, then removing pixels outside of the rectangle box, and wherein the outputting step outputs the character region with the rectangle box ~~and with the same colors and luminance values as the background~~.

19. (New) The program as claimed in claim 11, further comprising a module for removing non-character background in the image by outlining the character region with a rectangle box having a sufficient margin, then removing pixels outside of the rectangle box, and wherein the module for outputting outputs the character region with the rectangle box.